Most Frequently Occurring Classifications of Patents Returned
From A Search of 09736667 on August 11, 2004

Original Classifications
```
6   704/219
5   704/233
4   704/226
3   704/211
2   704/200.1
2   704/201
2   704/207
2   704/220
2   704/222
2   704/227
2   704/232
```

Cross-Reference Classifications
```
13   704/219
 8   704/226
 6   704/227
 4   704/223
 4   704/228
 4   704/230
 4   704/262
 3   704/203
 3   704/207
 3   704/264
 2   375/254
 2   704/208
 2   704/211
 2   704/220
 2   704/221
```

Combined Classifications
```
19   704/219
12   704/226
 8   704/227
 6   704/233
 5   704/207
 5   704/211
 5   704/223
 4   704/220
 4   704/228
 4   704/230
 4   704/262
 3   704/203
 3   704/222
```

```
3  704/264
2  370/252
2  375/254
2  381/94.7
2  704/200.1
2  704/201
2  704/202
2  704/205
2  704/208
2  704/221
2  704/229
2  704/232
2  704/258
```

Titles of Most Frequently Occurring Classifications of Patents Returned

From A Search of 09736667 on August 11, 2004

19 704/219   (6 OR, 13 XR)
        Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                          LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                          COMPRESSION/DECOMPRESSION
        704/200   SPEECH SIGNAL PROCESSING
        704/201   .For storage or transmission
        704/219   ..Linear prediction

12 704/226   (4 OR, 8 XR)
        Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                          LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                          COMPRESSION/DECOMPRESSION
        704/200   SPEECH SIGNAL PROCESSING
        704/201   .For storage or transmission
        704/226   ..Noise

 8 704/227   (2 OR, 6 XR)
        Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                          LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                          COMPRESSION/DECOMPRESSION
        704/200   SPEECH SIGNAL PROCESSING
        704/201   .For storage or transmission
        704/226   ..Noise
        704/227   ...Pretransmission

 6 704/233   (5 OR, 1 XR)
        Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                          LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                          COMPRESSION/DECOMPRESSION
        704/200   SPEECH SIGNAL PROCESSING
        704/231   .Recognition
        704/233   ..Detect speech in noise

 5 704/207   (2 OR, 3 XR)
        Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                          LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                          COMPRESSION/DECOMPRESSION
        704/200   SPEECH SIGNAL PROCESSING

```
     704/201      .For storage or transmission
     704/205      ..Frequency
     704/206      ...Specialized information
     704/207      ....Pitch
```

5 704/211   (3 OR, 2 XR)
      Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                 COMPRESSION/DECOMPRESSION
```
     704/200      SPEECH SIGNAL PROCESSING
     704/201      .For storage or transmission
     704/211      ..Time
```

5 704/223   (1 OR, 4 XR)
      Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                 COMPRESSION/DECOMPRESSION
```
     704/200      SPEECH SIGNAL PROCESSING
     704/201      .For storage or transmission
     704/221      ..Pattern matching vocoders
     704/223      ...Excitation patterns
```

4 704/220   (2 OR, 2 XR)
      Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                 COMPRESSION/DECOMPRESSION
```
     704/200      SPEECH SIGNAL PROCESSING
     704/201      .For storage or transmission
     704/220      ..Analysis by synthesis
```

4 704/228   (0 OR, 4 XR)
      Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                 COMPRESSION/DECOMPRESSION
```
     704/200      SPEECH SIGNAL PROCESSING
     704/201      .For storage or transmission
     704/226      ..Noise
     704/228      ...Post-transmission
```

4 704/230   (0 OR, 4 XR)
      Class   704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                 LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                 COMPRESSION/DECOMPRESSION

```
         704/200      SPEECH SIGNAL PROCESSING
         704/201      .For storage or transmission
         704/230      ..Quantization
```

```
 4  704/262      (0 OR, 4 XR)
        Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                       LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                       COMPRESSION/DECOMPRESSION
         704/200      SPEECH SIGNAL PROCESSING
         704/258      .Synthesis
         704/262      ..Linear prediction
```

```
 3  704/203      (0 OR, 3 XR)
        Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                       LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                       COMPRESSION/DECOMPRESSION
         704/200      SPEECH SIGNAL PROCESSING
         704/201      .For storage or transmission
         704/203      ..Transformation
```

```
 3  704/222      (2 OR, 1 XR)
        Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                       LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                       COMPRESSION/DECOMPRESSION
         704/200      SPEECH SIGNAL PROCESSING
         704/201      .For storage or transmission
         704/221      ..Pattern matching vocoders
         704/222      ...Vector quantization
```

```
 3  704/264      (0 OR, 3 XR)
        Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                       LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                       COMPRESSION/DECOMPRESSION
         704/200      SPEECH SIGNAL PROCESSING
         704/258      .Synthesis
         704/264      ..Excitation
```

```
 2  370/252      (1 OR, 1 XR)
        Class   370 :  MULTIPLEX COMMUNICATIONS
         370/241      DIAGNOSTIC TESTING (OTHER THAN SYNCHRONIZATION
)

         370/252      .Determination of communication parameters
```

```
2  375/254         (0 OR, 2 XR)
       Class   375 :  PULSE OR DIGITAL COMMUNICATIONS
       375/242         PULSE CODE MODULATION
       375/254         .Noise or distortion reduction


2  381/94.7        (1 OR, 1 XR)
       Class   381 :  ELECTRICAL AUDIO SIGNAL PROCESSING SYSTEMS
                        AND DEVICES
       381/94.1        NOISE OR DISTORTION SUPPRESSION
       381/94.7        .Using signal channel and noise channel


2  704/200.1       (2 OR, 0 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                        LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                        COMPRESSION/DECOMPRESSION
       704/200         SPEECH SIGNAL PROCESSING
       704/200.1       .Psychoacoustic


2  704/201         (2 OR, 0 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                        LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                        COMPRESSION/DECOMPRESSION
       704/200         SPEECH SIGNAL PROCESSING
       704/201         .For storage or transmission


2  704/202         (1 OR, 1 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                        LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                        COMPRESSION/DECOMPRESSION
       704/200         SPEECH SIGNAL PROCESSING
       704/201         .For storage or transmission
       704/202         ..Neural network


2  704/205         (1 OR, 1 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                        LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                        COMPRESSION/DECOMPRESSION
       704/200         SPEECH SIGNAL PROCESSING
       704/201         .For storage or transmission
       704/205         ..Frequency


2  704/208         (0 OR, 2 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                        LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO
```

```
                         COMPRESSION/DECOMPRESSION
          704/200        SPEECH SIGNAL PROCESSING
          704/201        .For storage or transmission
          704/205        ..Frequency
          704/206        ...Specialized information
          704/207        ....Pitch
          704/208        .....Voiced or unvoiced


2  704/221        (0 OR, 2 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                      LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                         COMPRESSION/DECOMPRESSION
          704/200        SPEECH SIGNAL PROCESSING
          704/201        .For storage or transmission
          704/221        ..Pattern matching vocoders


2  704/229        (1 OR, 1 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                      LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                         COMPRESSION/DECOMPRESSION
          704/200        SPEECH SIGNAL PROCESSING
          704/201        .For storage or transmission
          704/229        ..Adaptive bit allocation


2  704/232        (2 OR, 0 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                      LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                         COMPRESSION/DECOMPRESSION
          704/200        SPEECH SIGNAL PROCESSING
          704/231        .Recognition
          704/232        ..Neural network


2  704/258        (1 OR, 1 XR)
       Class   704 :  DATA PROCESSING: SPEECH SIGNAL PROCESSING,
                      LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

                         COMPRESSION/DECOMPRESSION
          704/200        SPEECH SIGNAL PROCESSING
          704/258        .Synthesis
```

Search Results - Record(s) 1 through 9 of 9 returned.

L6: Entry 1 of 9   File: USPT   Aug 24, 2004

US-PAT-NO: 6782360
DOCUMENT-IDENTIFIER: US 6782360 B1

TITLE: Gain quantization for a CELP speech coder

DATE-ISSUED: August 24, 2004

US-CL-CURRENT: 704/222; 704/219

INT-CL: [07] G10 L 19/04

L6: Entry 2 of 9   File: USPT   Jan 30, 2001

US-PAT-NO: 6182030
DOCUMENT-IDENTIFIER: US 6182030 B1

TITLE: Enhanced coding to improve coded communication signals

DATE-ISSUED: January 30, 2001

US-CL-CURRENT: 704/201; 340/318, 704/219, 704/230, D14/358, D14/496

INT-CL: [07] G10 L 21/02, G08 B 23/00

L6: Entry 3 of 9   File: USPT   Oct 12, 1999

US-PAT-NO: 5966689
DOCUMENT-IDENTIFIER: US 5966689 A

TITLE: Adaptive filter and filtering method for low bit rate coding

DATE-ISSUED: October 12, 1999

US-CL-CURRENT: 704/226; 704/219, 704/227

INT-CL: [06] G10 L 3/02, H04 B 1/66

L6: Entry 4 of 9   File: USPT   Oct 5, 1999

US-PAT-NO: 5963899
DOCUMENT-IDENTIFIER: US 5963899 A
** See image for Certificate of Correction **

TITLE: Method and system for region based filtering of speech

DATE-ISSUED: October 5, 1999

US-CL-CURRENT: 704/226; 704/233

h   e b   b cg b   e   e

INT-CL: [06] G10 L 3/02

L6: Entry 5 of 9   File: USPT   Jul 6, 1999

US-PAT-NO: 5920834
DOCUMENT-IDENTIFIER: US 5920834 A

TITLE: Echo canceller with talk state determination to control speech processor functional elements in a digital telephone system

DATE-ISSUED: July 6, 1999

US-CL-CURRENT: 704/233; 379/406.06, 704/221, 704/226

INT-CL: [06] H04 B 3/23, G10 L 3/02

L6: Entry 6 of 9   File: USPT   Sep 8, 1998

US-PAT-NO: 5806025
DOCUMENT-IDENTIFIER: US 5806025 A

TITLE: Method and system for adaptive filtering of speech signals using signal-to-noise ratio to choose subband filter bank

DATE-ISSUED: September 8, 1998

US-CL-CURRENT: 704/226; 381/94.3, 704/210

INT-CL: [06] G10 L 3/02

L6: Entry 7 of 9   File: USPT   Apr 21, 1998

US-PAT-NO: 5742694
DOCUMENT-IDENTIFIER: US 5742694 A

TITLE: Noise reduction filter

DATE-ISSUED: April 21, 1998

US-CL-CURRENT: 381/94.2

INT-CL: [06] H04 B 15/00

L6: Entry 8 of 9   File: USPT   Jan 6, 1998

US-PAT-NO: 5706395
DOCUMENT-IDENTIFIER: US 5706395 A

TITLE: Adaptive weiner filtering using a dynamic suppression factor

DATE-ISSUED: January 6, 1998

US-CL-CURRENT: 704/226; 704/227, 704/228

h   e b   b cg b   e   e

INT-CL: [06] <u>G10</u> <u>L</u> <u>3/02</u>

L6: Entry 9 of 9   File: USPT   Dec 31, 1996

US-PAT-NO: 5590241
DOCUMENT-IDENTIFIER: US 5590241 A

TITLE: Speech processing system and method for enhancing a speech signal in a noisy environment

DATE-ISSUED: December 31, 1996

US-CL-CURRENT: <u>704</u>/<u>227</u>; <u>381</u>/<u>94.7</u>, <u>704</u>/<u>203</u>, <u>704</u>/<u>226</u>, <u>704</u>/<u>228</u>, <u>704</u>/<u>272</u>

INT-CL: [06] <u>G10</u> <u>L</u> <u>3/02</u>, <u>G10</u> <u>L</u> <u>9/00</u>

h   e b   b cg b   e   e